Special 510(k) Premarket Notification GE Medical Systems Lunar – Lunar iDXA Bone Densitometer September 19<sup>th</sup>, 2005

### Attachment B 510 (k) Summary of Safety and Effectiveness Prepared in accordance with 21 CFR Part 807.92(c).



GF Healthcare

#### Section a):

1. <u>Submitter</u>: GE Medical Systems Ultrasound and Primary Care Diagnostics, LLC division of

General Electric Company

GE Medical Sustems Lunar (business name)

726 Heartland Trail Madison, WI 53717

Contact Person: James P. Raskob

Safety and Regulatory Engineering Manager Telephone: 608-826-7425; Fax: 608-299-2132

Date Prepared: September 19th, 2005

2. <u>Device Name</u>: Lunar iDXA bone densitometer Bone Densitometer, 21 CFR 892.1170, 90-KGI

3. Marketed Device: Prodigy bone densitometer: K915535 K982267 K983564 K000826 K001756

K001812 K011917 K023554 currently in commercial distribution.

- 4. <u>Device Description</u>: The Lunar iDXA bone densitometer is a full featured general purpose x-ray bone densitometer system. It consists of a scan table that provides x-ray source generation, digital x-ray detection and processing. The user interface includes a computer workstation and a color monitor display. This modification will provide users with improved image resolution and ease of use with patients of larger size.
- 5. <u>Indications for Use</u>: The Lunar iDXA Bone Densitometer provides an estimate of bone mineral density and fat and lean tissue mass. The values can then be compared to a reference population at the sole discretion of the physician.
- 6. <u>Comparison with Predicate Device</u>: The Lunar iDXA is of a comparable type and substantially equivalent to the current Prodigy bone densitometer. It has the same technological characteristics, is comparable in key safety and effectiveness features, it utilizes similar design, construction, and materials, and has the same intended uses and basic operating modes as the predicate device.

### Section b):

1. <u>Non-clinical Tests</u>: The device has been evaluated for electrical and mechanical safety, and has been found to conform with applicable medical device safety standards. In vitro precision and accuracy values were computed through a series of tests on phantoms and were within design specifications.

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- 2. <u>Clinical Tests</u>: No clinical tests were required to establish safety or effectiveness, however a 40 person in vivo study was done to verify that the design specifications of accuracy and precision were met.
- 3. Conclusion: Intended uses and other key features are consistent with previously cleared bone densitometer. The design and development process of the manufacturer conforms with 21 CFR 820 and ISO 13485 quality systems. The device conforms to applicable medical device safety standards and compliance was verified through independent evaluation with ongoing factory surveillance. The Lunar iDXA bone densitometer is substantially equivalent to currently marketed devices. No new safety and effectiveness questions are raised with the Lunar iDXA bone densitometer.

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## Attachment C Truthful and Accurate Statement

# PREMARKET NOTIFICATION TRUTHFUL AND ACCURATE STATEMENT (as required by 21 CFR 807.87(j))

I certify that, in my capacity as of Safety and Regulatory Engineering Manager for GE Medical Systems Lunar, I believe, to the best of my knowledge, that all data and information submitted in this premarket notification are truthful and accurate and that no material fact has been omitted.

James P. Raskob

Date: Scrt 19m 2005

510(k) number:

<sup>\*</sup> Must be signed by a responsible person of the firm required to submit the premarket notification (e.g., not a consultant for the 510(k) submitter).





Food and Drug Administration 9200 Corporate Boulevard Rockville MD 20850

### OCT 2 0 2005

Mr. James P. Raskob Safety & Regulatory Engineering Manager GE Medical Systems Lunar GE Healthcare 726 Heartland Trail MADISON WI 53717 Re.: K052581

Trade/Device Name: Lunar iDXA Regulation Number: 21 CFR 892.1170 Regulation Name: Bone Densitometer

Regulatory Class: II Product Code: KGI

Dated: September 19, 2005 Received: September 20, 2005

### Dear Mr. Raskob:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (Premarket Approval), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the <u>Code of Federal Regulations</u>. Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the <u>Federal Register</u>.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at one of the following numbers, based on the regulation number at the top of this letter:

| 21 CFR 876.xxxx<br>21 CFR 884.xxxx<br>21 CFR 892.xxxx | (Gastroenterology/Renal/Urology)<br>(Obstetrics/Gynecology)<br>(Radiology) | 240-276-0115<br>240-276-0115<br>240-276-0120<br>240-276-0100 |
|---|--|--|
| Other   |  | 210 270 0100   |

Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address <a href="http://www.fda.gov/cdrh/industry/support/index.html">http://www.fda.gov/cdrh/industry/support/index.html</a>.

Sincerely yours,

Manay C. Brogdon
Nancy C. Brogdon

Director, Division of Reproductive, Abdominal, and Radiological Devices

Office of Device Evaluation

Center for Devices and Radiological Health

Enclosure

# **Indications for Use**

| 510(k) Number (if known): <u>K052581</u>   |   |
|--|---|
| Device Name: Lunar iDXA  |   |
| Indications For Use: The Lunar iDXA Bone Densitometer provides an exand lean tissue mass. The values can then be compadiscretion of the physician. | stimate of bone mineral density and fat<br>ared to a reference population at the sole |
| Prescription Use X D/OR (Part 21 CFR 801 Subpart D)  | Over-The-Counter Use(21 CFR 801 Subpart C)  |
| (PLEASE DO NOT WRITE BELOW THIS LINE IF NEEDED)  | E-CONTINUE ON ANOTHER PAGE  |
| Concurrence of CDRH, Office of   | of Device Evaluation (ODE)  |
| (Division Sign-Off) Division of Reproductive, Abdominal, and Radiological Devices 510(k) Number KO52581  | Page 1 of _1_   |